



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/595,223

03/27/2006

Tibor Somogyi

21.1140

5019

23718 7590 05/12/2009
SCHLUMBERGER OILFIELD SERVICES
200 GILLINGHAM LANE
MD 200-9
SUGAR LAND, TX 77478

EXAMINER

BEACH, THOMAS A

ART UNIT

PAPER NUMBER

3671

MAIL DATE

DELIVERY MODE

05/12/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/595,223	Applicant(s) SOMOGYI ET AL.	
	Examiner THOMAS A. BEACH	Art Unit 3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Figures 1 & 2 of the instant application 10/595223 (cited as prior art) in view of Deans et al 20040262008. Figures 1 & 2 of the instant application 10/595223 show a sub-sea controller (21) and method located under the sea level for managing at plurality of tools in a sub-sea well installation (fig 1), the sub-sea controller (21) having a downloading means (25) to download an application module to the sub-sea controller (21); a native application (24) implemented within the sub-sea controller; and a virtual machine (hardware 22, disclosed as a CPU, flash memory, etc that uses a software implementation) to execute the downloaded application module from the native application (utilizing the OS, 23). Figures 1 & 2 of the instant application 10/595223 do not specify the method step the virtual machine to execute the downloaded application module *separately* from the native application. However, Deans shows similar a sub-sea controller (28) and method located under the sea level for managing at plurality of tools in a sub-sea well installation, the sub-sea controller (28) having a downloading

Art Unit: 3671

means [0038 & 0042] to download an application module to the sub-sea controller (28); and a virtual private network [0044] to execute the downloaded application module where the controller (28) specifically disclosed as capable of having the hub 28 separate from the controller 26 in order to operate the well control operations, tools etc, independent/simultaneously during repair/removal of the communication hub 28 which is capable of including a software update [0035]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify, as taught by Deans, to include the ability to operate the subsea controller using the a virtual machine to continue tool operation during downloading of an application (a known type of communication hub servicing) for the expected result of improved operations without having down time during production.

As concerns claims 2 and 9, the combination shows the sub-sea controller (21) with a native application implemented within the sub-sea controller (fig 1-2); and a native interface [Dean ;0024, 0025, 0034, 0045, 0049, 0050, 0060, & 0064-0066] implemented within the sub-sea controller, the native interface enabling the application module to access the native application.

As concerns claims 3 and 10, the combination shows the native interface (fig 2, 23) enables the native application to access the application module [Dean; 0024, 0025, 0034, 0045, 0049, 0050, 0060, & 0064-0066].

As concerns claims 4 and 12, the combination shows a native memory wherein the native application is executed; and a defined memory (RAM, 22 of fig 2) wherein the

Art Unit: 3671

application module (Dean; 206) is executed, the defined memory being distinct from the native memory [Dean; 0024, 0025, 0034, 0045, 0049, 0050, 0060, & 0064-0066].

As concerns claim 5, the combination the combination a protection register, the protection register authorizing an access to the native application only if a key code (protocol) is written hereinto; accessing means to access the protection register from the application module.

As concerns claims 6 and 13, the combination shows the application module contains a driver for a tool [0024, 0025, 0034, 0045, 0049, 0050, 0060, & 0064-0066].

As concerns claim 7, Deans shows a sub-sea well installation having the sub-sea controller (fig 1)

As concerns claim 11, the combination shows the downloading and the executing of the application module [0024, 0025, 0034, 0045, 0049, 0050, 0060, & 0064-0066] are performed without interrupting an executing of the native application of the sub-sea controller (28).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6-11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dean 6,422,315 in view of Marsh et al 20020159439. Dean shows a

Art Unit: 3671

sub-sea controller and method of updating software of a sub-sea controller (190) located under the sea level for managing at plurality of tools in a sub-sea well installation, the sub-sea controller (190) having a downloading means (124, col. 5, lines 63+) to download an application module to the sub-sea controller (190); but does not show a virtual machine to execute the downloaded application module. However, Marsh shows a similar controller having downloading means a virtual machine 74 to execute the downloaded application module (fig 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dean, as taught by Marsh, to include a virtual machine for the expected result of redundancy during downloading as know by utilizing a virtual machine and be able to run multiple OS environments that can co-exist on the same computer, thus operating multiple tools etc's, thereby improving the usability of the system.

As concerns claims 2-3 and 9-10, the combination shows the sub-sea controller (Dean 190) with a native application (Marsh, fig 4) implemented within the sub-sea controller; and a native interface (Marsh, fig 4) implemented within the sub-sea controller, the native interface enabling the application module to access the native application (Marsh, fig 5) and the native interface (58) enables the native application to access the application module (Marsh, figs 4-5).

As concerns claim 6 and 13, the combination shows the application module contains a driver capable for a tool (Marsh, fig 5, 28).

As concerns claim 7, the combination shows a sub-sea well installation having the sub-sea controller (Dean, fig 1)

As concerns claim 11, the combination show the downloading and the executing of the application module (Marsh JVM, 74, fig 4) are performed without interrupting an executing of the native application of the sub-sea controller (Dean 190).

4. Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dean 6,422,315 and Marsh et al 20020159439 in view of Holiday, Jr. 6,202,208. The combination does not specifically disclose native memory wherein the native application is executed; and a defined memory wherein the application module is executed, the defined memory being distinct from the native memory. However, Holiday discloses JVM that specifically discloses a native memory (102) wherein the native application is executed; and a defined memory (106) wherein the application module is executed, the defined memory being distinct from the native memory. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination, as taught by Holiday, to include separate memories for the expected result of a JVM to function it is required, thus obvious.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dean 6,422,315 and Marsh et al 20020159439 in view of Rice, III 20020174010.

.As concerns claim 5, the combination does not show a protection register, the protection register authorizing an access to the native application only if a key code is written hereinto; accessing means to access the protection register from the application module. However, Rice shows that a protection register, the protection register

Art Unit: 3671

authorizing an access to the native application only if a key code is written hereinto; accessing means to access the protection register from the application module is known [0215 & 0216]. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination, as taught by Rice, to include a key code for the expected result of improved security and functionality.

Response to Arguments

6. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection. Applicant's arguments regarding Dean are noted; however, paragraph 0035 of Dean clearly states the advantage of and need to having independent servicing of the communications hub while the controller continues to operate the tool. Thus, applicant's argument to state that Dean is "totally silent" of the problem of stopping the subsea well during software update or servicing is not persuasive.

7. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the *simultaneous* operation of the tools during/while downloading of application(s)) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

8. In response to applicant's argument that Marsh, Holiday and Rice are nonanalogous art, it has been held that a prior art reference must either be in the field of

Art Unit: 3671

applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Dean discloses a downloading function as noted by applicant. Again, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the *simultaneous* operation of the tools during/while downloading of application(s)) are not recited in the rejected claim(s)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3671

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Beach whose telephone number is 571.272.6988. The examiner can normally be reached on Monday-Friday, 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Will can be reached on 571.272.6998. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thomas A. Beach

/Thomas A Beach/
Primary Examiner, Art Unit 3671

May 12, 2009

THOMAS A. BEACH

Application/Control Number: 10/595,223

Page 10

Art Unit: 3671

**Primary Examiner
Group 3600**